



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

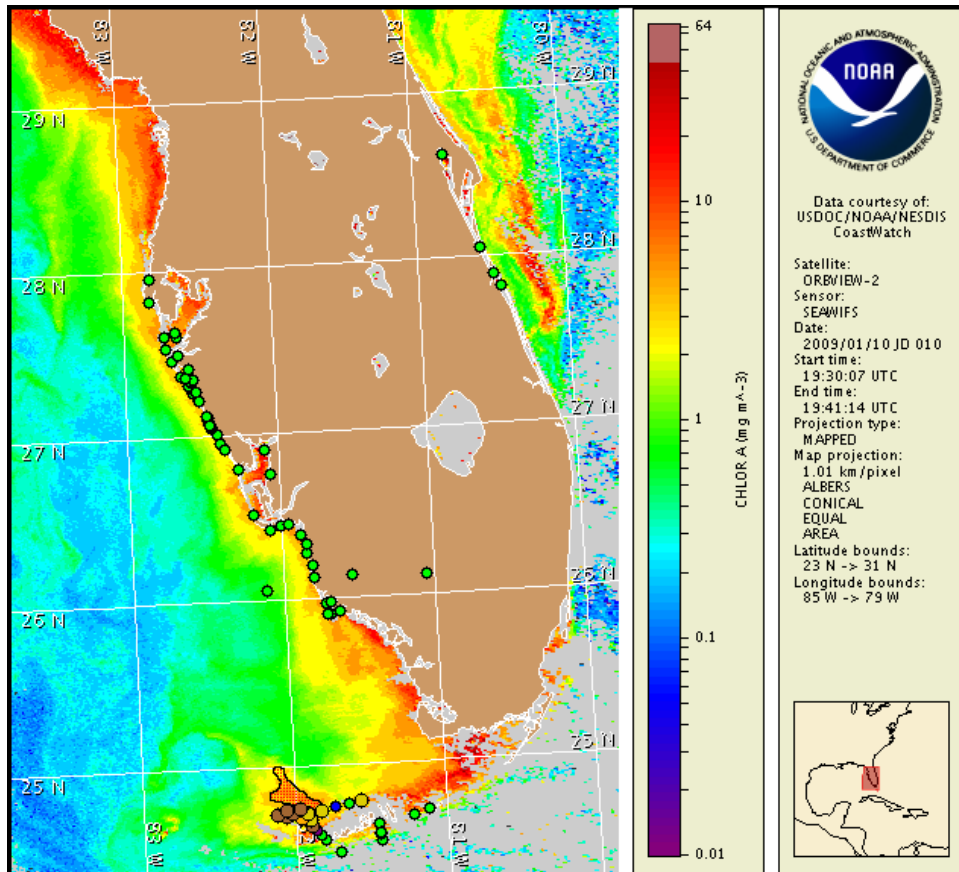
12 January 2009

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: January 8, 2009



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from January 3 to 9 shown as red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.

Conditions Report

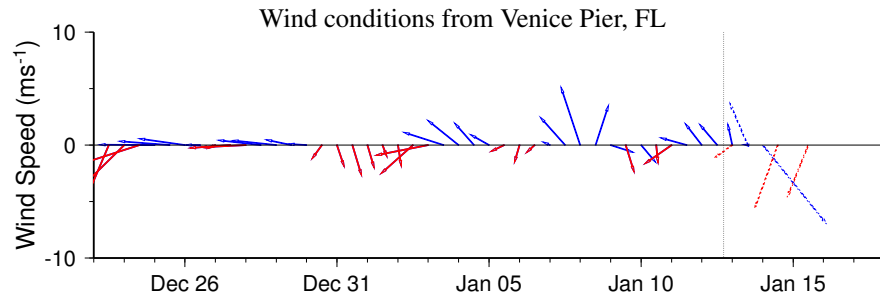
A harmful algal bloom has been identified on the gulf side of the lower Florida Keys in Monroe County, where patchy very low impacts are possible today and patchy moderate impacts are possible Tuesday and Wednesday. No additional impacts are expected elsewhere in southwest Florida today through Wednesday, January 14.

Analysis

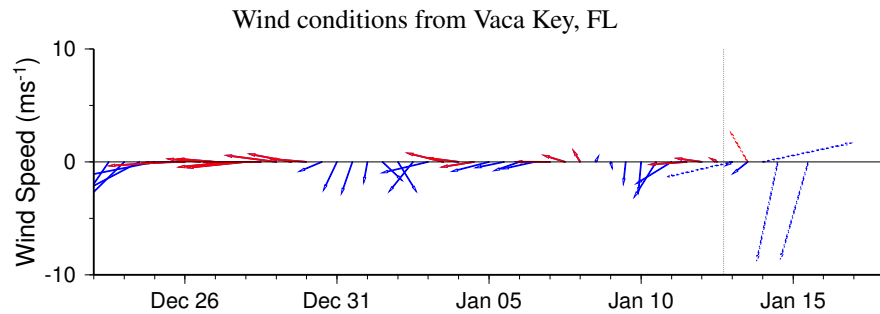
A harmful algal bloom has been reconfirmed offshore on the gulf side of the lower Florida Keys early last week (1/6, MML). A large elevated to high chlorophyll feature remains visible in SeaWiFS imagery as of January 10, stretching approximately 50 miles southeastward from 25°9'34"N 82°24'30"W to Marquesas Keys. Westward transportation of the feature is likely today and southward transportation is likely Tuesday night and Wednesday. Continued sampling is recommended.

In addition, elevated to high chlorophyll (3-10 $\mu\text{g/L}$) remains visible alongshore northern Monroe County in the Ten Thousand Islands. Background concentration of *Karenia brevis* was detected last Monday in this region (1/5, FWRI, not shown on the plot). Continued sampling is recommended.

~ Gan, Fenstermacher



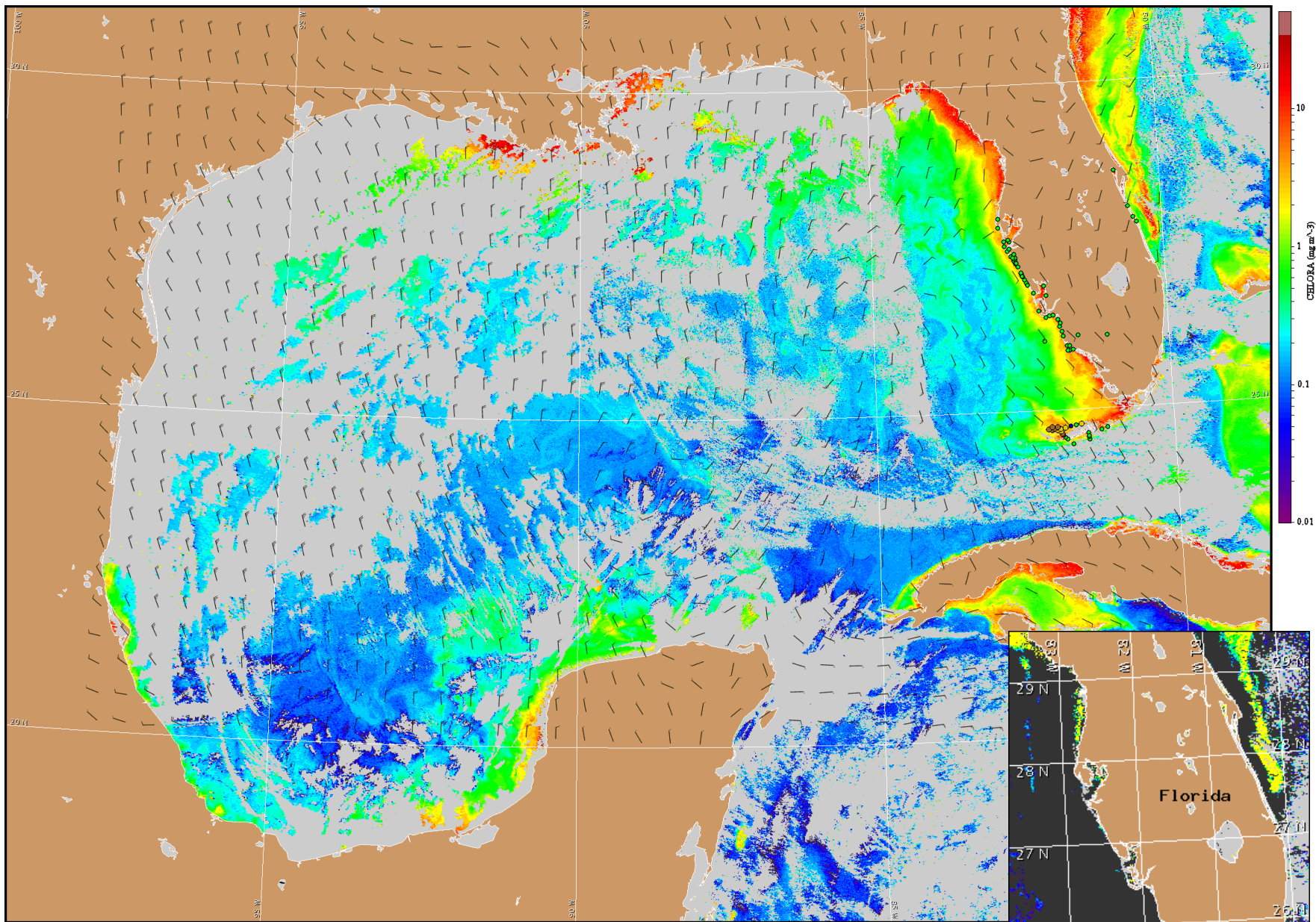
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).



Wind Analysis

SW Florida: Northeast winds today (10-15kn, 5-8m/s). East winds tonight (10-15kn), becoming southeast after midnight. Southwest winds Tuesday (15-20kn, 8-10m/s), shifting to northwest winds in the afternoon (20kn). North winds Wednesday (10-15kn).

Florida Keys: East to southeast winds today (5-10kn, 3-5m/s). South to southwest winds Tuesday (10-15kn, 5-8m/s). Northwest to north winds Tuesday night (20kn, 10m/s). North to northeast winds Wednesday (15-20kn).



Satellite chlorophyll image and forecast winds for January 13, 2009 12Z with Cell concentration sampling data from January 3 to 9 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).